DRAFT

New Jersey Greenhouse Gas Inventory and Reference Case Projections 1990-2020

Frequently Asked Questions

Introduction

Increasing levels of greenhouse gases (GHGs) in the world's atmosphere threaten to cause dangerous changes to the climate. Levels of GHGs have been increasing over the last several generations due to combustion of carbon-containing fuels and other human activities. It is likely that the worst changes to the world's climate can be addressed with aggressive reductions in GHG emissions over the next several decades. In 2007 New Jersey began to take a leading role in the effort to reduce GHG emissions with the issuance of Governor Corzine's Executive Order 54 and with the passage of the Global Warming Response Act. This order and law require a reduction of NJ GHG emissions to 1990 levels by 2020 and an 80% reduction below 2006 levels by 2050. Also required is an inventory of GHG emissions by the DEP, with periodic updates. Reporting of GHG emissions and related information including use of certain fuels is also required.

In accordance with these new requirements, DEP has prepared an updated GHG emissions inventory, with projections of emissions to the year 2020. This inventory, the ***DRAFT New Jersey Greenhouse Gas Inventory and Reference Case Projections 1990-2020*** is now available for stakeholder input at www.state.nj.us/globalwarming.

Frequently asked questions

1. Why was the DRAFT inventory developed?

NJDEP developed its first estimate of GHG emissions for the year 1990 and released a report of these emissions in 1996. It has regularly updated this inventory since then using essentially the same methodology. With the issuance of Governor Corzine's Executive Order 54 (Order) and the passage of the Global Warming Response Act (Law) in 2007, the DEP sought to improve the estimation methodology and to update the inventory.

2. How will the inventory be used?

The inventory, once finalized, will provide the baseline (1990 value) for the requirement of Executive Order 54 and The Global Warming Response Act that emissions in 2020 are reduced to the 1990 level. The methods used to estimate the emissions, as improved with new data and information as available, will provide the 2006 value which serves as the baseline for the requirement of the Order and Act that emissions be reduced 80% below 2006 levels by 2050. Also, the inventory and its subsequent updates will meet the requirement of the Law for continued tracking of the status of GHG reductions in New Jersey.

3. How does the DRAFT inventory relate to the Energy Master Plan?

The DRAFT inventory report includes analysis of current greenhouse gases in New Jersey, projections of emissions in a "business as usual" scenario as well as projections of emissions in a scenario that accords to Governor Corzine's publicly stated goals to reduce energy use in New Jersey 20% below business as usual by 2020.

4. What does the DRAFT inventory tell us?

The DRAFT inventory presents the best emissions estimate currently available for 2004, and provides much more detail on emission sources than previous inventories. It also presents projections to 2020 both under a business-as-usual scenario as well as in a scenario that accords to Governor Corzine's publicly stated goals to reduce energy use in New Jersey 20% below business as usual by 2020.

5. Have emissions increased recently?

Yes. Although there have been yearly fluctuations due to a variety of factors, GHG emissions have generally been increasing yearly since 1990.

6. Was DEP's earlier goal of a 3.5% reduction below 1990 levels by 2005 met?

Although complete data for 2005 are not yet available, it is certain that this goal, which was hoped to be achieved through voluntary measures, was <u>not</u> achieved, despite the best voluntary efforts. This highlights the importance of statutory emissions reduction requirements, as established in the Global Warming Response Act.

7. How can people provide feedback or ask questions about the inventory?

Comments and questions are encouraged to be submitted through the New Jersey Global Warming website, www.state.nj.us/globalwarming. The deadline for comments is March 20, 2008.

8. What process will be used to finalize the DRAFT inventory?

Comments received will be reviewed. Any changes that are necessary as a result of this review process will be made.

9. How can the inventory be improved?

A major improvement in both the timeliness and accuracy of the data upon which the inventory is based is expected when the NJDEP greenhouse gas emissions monitoring and reporting program mandated by the Global Warming Response Act becomes operative. Additional research and data gathering efforts by the DEP and other State agencies are expected, which should improve estimates of the categories of emissions not directly related to the data expected to be collected through the emissions monitoring and

reporting program. Such categories include, for example, forested lands, which sequester carbon and thus offset some carbon dioxide emissions. It is hoped that comments received during the review process will provide insights useful in refining estimation methods and will point to additional sources of potentially useful data.

10. What are the next steps in New Jersey's effort to reduce GHG emissions?

The Global Warming Response Act requires a report be presented with recommendations to achieve the statewide greenhouse gas emissions reduction limits. A draft of those recommendations will be available for stakeholder comment in the late spring. Additionally, a draft Energy Master Plan will be available for stakeholder comment as well. . In addition, there are already programs underway which have the potential to achieve significant GHG emissions reductions. These include a variety of energy conservation and renewable energy development efforts by the New Jersey Board of Public Utilities as well as the Regional Greenhouse Gas Initiative (RGGI), which will cap, and then reduce, GHG emissions from power plants.

11. What data sources were used to compile the inventory information?

The data comes primarily from the US Department of Energy - Energy Information Administration; NJDEP; NJBPU; NJDOT; and USEPA. Some other sources were used as well, including the US Bureau of Economic Analysis, USDA Forest Service, Rutgers University Center for Remote Sensing and Spatial Analysis, Federal Aviation Administration, Federal Highway Administration, Rutgers University Center for Energy, Economic and Environmental Policy, Food and Agricultural Policy Institute, Intergovernmental Panel on Climate Change, National Agricultural Statistics Service, US Geological Survey, and World Meteorological Organization.

12. What process will be used, going forward, to update the information?

As the NJDEP greenhouse gas emissions monitoring and reporting program mandated by the Global Warming Response Act becomes operative, the New Jersey-specific data it will provide will be used to the extent feasible. It is expected that the first of these data will represent calendar year 2009, and will be received by the DEP in 2010. Until this time existing methods and data sources, which as noted above are primarily those made available by the US Department of Energy - Energy Information Administration; NJDEP; NJBPU; NJDOT; and USEPA, will be used to update the inventory as these data become available.

13. How does this NJ database relate to federal (1605 b) emissions data and to other GHG inventories?

The federal 1605b program is voluntary. While it includes valuable information on GHG emissions and emissions reduction steps made by a wide variety of industrial facilities and other sources, it does not provide a comprehensive inventory. A national greenhouse gas emissions inventory is prepared yearly by USEPA based on estimation methods and

data similar to those used in developing the New Jersey inventory. The US Department of Energy, Energy Information Administration also prepares and regularly updates a national inventory. In addition numerous other states have prepared greenhouse gas inventories. It is believed that the New Jersey inventory is one of the most accurate and detailed of the state-level inventories.